

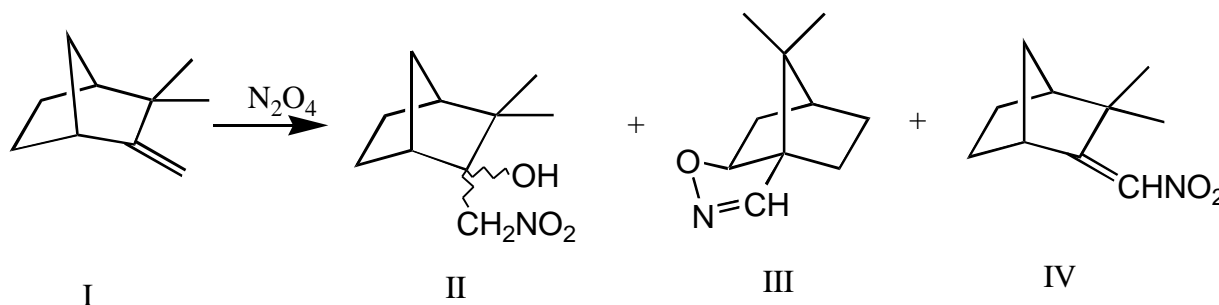
## Camphene and $\alpha$ -Pinene Interaction with $N_2O_4$ and Concentrated $HNO_3$

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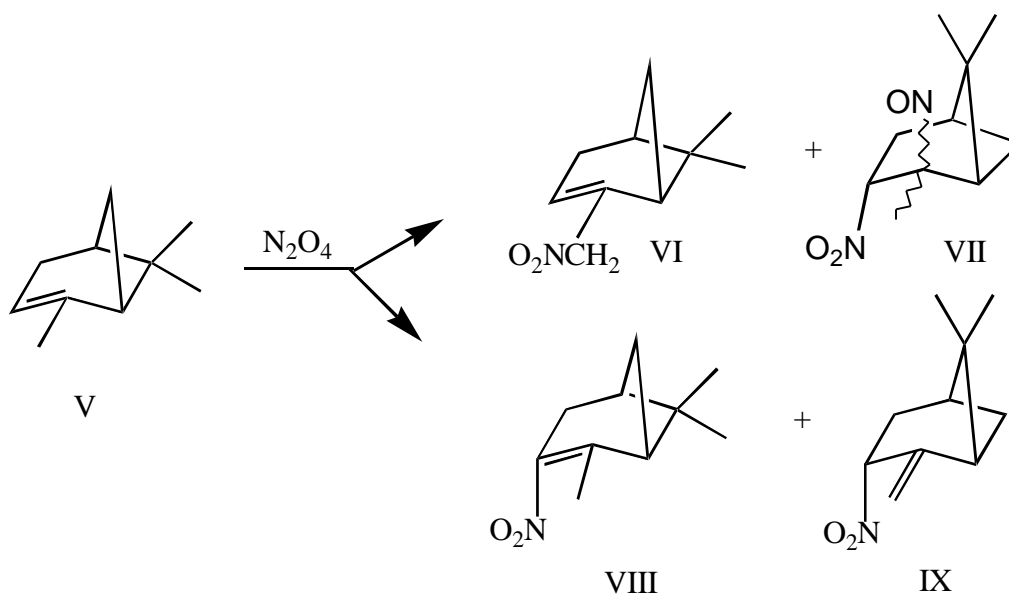
Camphene (I) interaction with  $N_2O_4$  results in the following compounds (II-IV):



Their ratio depends on the presence of zeolite in the reaction medium and solvent nature. The formation of primary nitrosation product (III), easily converted into 2-exo-hydroxy-1-cyano-7,7-dimethyl proved to be an unexpected result under these conditions.

The result of interaction of (I) with conc.  $HNO_3$  slightly depends on the presence of zeolite: isobornyl nitrate is the main product.

$\alpha$ -Pinene (V) interaction with  $N_2O_4$  results in a mixture of nitro- and nitroso compounds (VI-IX):



The absence of rearrangement into compounds with norbornane or menthane skeleton, usual for acidic medium, provides a peculiarity of olefine (V) behaviour in the reaction with  $N_2O_4$ . At the same time terpeneol nitrate resulted from compound (V) by interaction with conc.  $HNO_3$ .